ASM09

INTERFACE PROGRAM IN BASIC

```
100 REM ASMO9- EXEC. FOR ASMO9.BIN
 200 CLEAR
300 BL=1:REM DEL 10 FOR NO BLOADS
 400 HOME: VTAB (4): INVERSE
 500 D$=CHR$(4):PRINTD$; "PR#0"
600 PRINTD# "CLOSE"
 700 X = " THE MILL / APPLE ][ 6809 ASSEMBLER "
SQO X=LEN(X$)
900 PRINTSPC(X):PRINT:PRINTX$:PRINTSPC(X):PRINT
 1000 X = " (C) 1981 CONEJO COMPUTER PRODUCTS
 1100 PRINTSPC(X):PRINT:PRINTX#:PRINTSPC(X):PRINT
 1200 REM -----
1300 REM ---- CONFIGURATION PARAMS
1400 REM PRINTER PAGE DIM.
1500 WD=78: DP=66: REM WIDTH, DEPTH
1505 REM *** MEMORY & I/O CONSTANTS ***
1510 MEM = 8192: REM>> LOAD HERE <<
1700 ID-MEM:REM 6502 CODE HERE
1710 CODE=IO+256:REM 6809 CODE HERE
1800 SLOT=4:REM MILL SLOT#
1810 SN=SLOT*16:REM LSB OF I/O ADDR
1900 SLOT=49280+SN:REM SLOT->ADDR
2000 REM >>> 4 PAGE ZERO BYTES <<<
2100 RCMD=250:REM MAILBOX W/09 & ASMO9IO.BIN
2200 TCMD=RCMD+2:REM DITTO
2210 POKE TCMD+2, SN: REM USED BY ASMO910
2220 XFADR=512:REM $200, SEE XFILE
2300 REM --- END OF CONSTANTS
2400 REM -----
2500 LI=0:08=0:F1$="":PASS=1
2600 REM CRT DIM.
2800 REM GET '09 CDDE
2900 DNERR GDTD 3200
3000 GDSUB16000
3100 GOSUB 15000:GOTO 3600
3200 HOME: FLASH
3300 PRINT"ASMO9.BIN OR ASMO9IO.BIN NOT FOUND"
3400 GDTD3400
3500 REM ----
3600 HOME
3610 VTAB(4): INVERSE
3620 PRINT" SELECT DRIVE NUMBER, <CR>> FOR #1 ";
3630 NORMALIPRINT" "; CHR$(7); GET Y$
3640 IF ASC(Y$)=13 THEN Y$="1"
3650 X=ASC(Y$):IF (X<=48)OR(X>50)THEN3600
3655 VTAB(4):HTAB(37):PRINTY$
3660 DR#=",D"+Y#
3665 REM DEFAULT LISTING SIZE:
3670 POKE CODE+3,38:POKE CODE+4,23
3680 REM <PRINTER W/O FORM FEED> POKE CODE+6,0
3700 VTAB(8) | PRINT
3800 VTAB(8): INVERSE
3900 PRINT"ENTER BOURCE FILE NAME"; CHR$(7)
4000 VTAB(8):HTAB(25)
4100 NORMAL: INPUT F: GDSUB 15000
4200 PRINT
4300 IF F#="" THEN 3600
4400 D#=F#+".HEX"
4500 DNERR GOTO 4900
4600 F==F=:PRINTD=;"VERIFY ";F++DR+
4700 PRINTD#; "READ "; F#: PRINTD#; "CLOSE"
4800 GOTO 5200
5000 FLASH:PRINT"TEXT FILE: ";
```

```
5100 PRINTF$+DR$:" NOT FOUND":GOTO3700
5200 GOSUB 15000:VTAB(10):PRINTSPC(39):PRINT
5300 VTAB(13) INVERSE
5400 PRINT"WANT OBJECT CODE (Y/N)";
5500 G08UB 15300:0B=Y
5600 IFY=-1 THEN 5300
5700 IF DB=0 THEN 6000
5800 ON ERR GOTO 5910
5900 PRINTD#; "DELETE "; D#
5910 GOSUB15000
6000 VTAB(15) INVERSE
               WANT LISTING (Y/N)"
6100 PRINT"
6200 GOSUB15300:LI=Y
6300 IFY=-1 THEN 6000
6400 POKE CODE+2. ((OB*128)+LI):REM TO A6M09.BIN
6500 IF LI=0 THEN 7700
6600 VTAB(17) INVERSE
6700 PRINT"SELECT LISTING DEVICE: "
6800 PRINT" (CR) = CRT, "1
6900 PRINT"# = SLOT # OF PRINTER":
7000 NORMAL:PRINT" ?";CHR$(7);:GET LI$
7100 PRINT LIS
7200 IF ASC(LI#)=13 THEN LI#="0":GOTO7600
7300 X=ASC(LI#)
7400 IF (X<48) OR (X>55) THEN6600
7500 POKE CODE+3, WD: POKE CODE+4, DP
7600 INVERSE
7700 VTAB(23) | PRINT"PASS 1, FILE | "|F*
7800 NORMAL
7900 GOSUB 13100:REM STARTUP MILL
8000 REM !!!PRINTD#; "OPEN "|F#
8100 PRINTD#1 "READ "1F#
8110 FX#=F#
8200 REM: -- POLL --
8400 GOT08600
8500 REM *** (PREMATURE) EOF
8505 REM SEND -1 DATA TO ASSEMBLER
8510 GOSUB 15000
8520 POKE RCMD+1,255:POKE RCMD,0
8600 REM -----
8605 ONERR GOTO 8500
8610 CALL ID:REM GOTO 6502 CODE
8700 G08UB15000
8800 RX=PEEK(RCMD): TX=PEEK(TCMD)
8900 REM RCMD: 1=OPEN, 2=READ, 3=REWIND
               4=8TOP, 5=OPEN NEW, 6=RESUME MAIN
8910 REM
9000 REM TCMD: 1=LIST, 2=BEGIN OBJ, 3=BEGIN LIST
9100 IF TX THEN GOSUB 11200
9200 IF RX>6 THEN STOP
9300 ON RX GOBUB 10900, 10800, 9600, 12500, 10610, 10700
 9400 POKE RCMD, 0
9500 GDTD 8200
 9600 REM *** REWIND (3)
 9700 PRINT:PRINTD#; "CLOSE"
 9800 IF LI = "O" THEN HOME: INVERSE
 9900 PRINT"PASS 2, OBJECT FILE="; NORMAL
 10000 IF 0B=0 THENPRINT"(NONE)":60T0 10300
 10100 PRINT" "10$
 10200 GDSUB15000:PRINTD$;"DPEN "; 0$
 10300 PRINTD#1"PR# "|LI#
 10310 FX#=F#
 10400 PRINTDS: "READ ":FX$
 10500 POKE TCMD, 0: PASS=2
 10600 RETURN
```

```
10610 REM *** READ AN XFILE (5)
 1Q620 X=XFADR:F1$="":POKE RCMD+1,0
10630 X1=PEEK(X): IF X1=0 THEN 10650
 10640 F1$=F1$+CHR$(X1):X=X+1:GOTO 10630
 10650 ON ERR GOTO 10690
 10652 IF F1#<>""THENPRINTD#; "VERIFY ";F1#:FX#=F1#
10455 6080815000
 10666 PRINTDS; "READ "; FXS
 10670 RETURN
10690 GOSUB 15000: POKE RCMD+1,255: REM ERROR
 10692 PRINT
10693 PRINTF1#;" NOT FOUND"; CHR#(7)
10696 FX#=F#:F1#="":RESUME
10700 REM *** RESUME READ OF MAIN (6)
10710 PRINTD#; "CLOSE "; FX#
10720 FX$=F$:F1$=""
10730 PRINTD#; "READ "; FX#
10740 RETURN
10800 REM *** READ (2)
10810 STOP
10900 REM *** OPEN (1)
11000 RETURN
11100 REM -----
11200 REM TCMD ACTION
11300 ON TX GOTO 11500,11600,11900
11400 STOP:REM TX>3
11500 STOP: REM TX=1 DONE IN ASMO910
11600 REM TX=2 START HEX
11700 PRINTD$:REM GOOD OLE DOS!
11800 PRINTDS; "WRITE "; 05: GOTO 12200
11900 REM TX=3=END HEX
12000 PRINT
12100 PRINTDS; "READ ":FX$
12200 POKE TOMD, O
12300 RETURN
12400 REM -----
12500 REM END PASS 2
12600 PRINTD#; "PR# 0"
12700 PRINTD#: "CLOSE"
12800 POKE SLOT+2,0
12900 END
13000 REM
13100 REM INITIALIZE THE MILL
13200 POKE RCMD, O: POKE TCMD, O
13300 B8=128
13400 POKE SLOT+0,88
13500 POKE SLOT+1,88
13600 POKE SLOT+2.0
13700 POKE SLOT+3,88
13800 POKE SLOT+4,88
13900 POKE SLOT+5.88
14000 POKE SLOT+7, BB
14100 REM SETUP 09'S RESTART
14200 REM JMP CODE
14300 REM
          AT $40FA
14400 X=PEEK(65534) *256+PEEK(65535)
14500 POKE X+0,126:REM $7E
14600 POKE X+1,CODE/256
14700 POKE X+2, CODE-(256*(CODE/256))
14800 REM ASMO9IO STARTS UP '09
14900 RETURN
15000 REM *** KILL ON ERR
15100 POKE 216,0
15200 RETURN
```

15300 REM GET Y/N REPLY

15400 Y=-1

15500 NORMALIPRINT" ?"; CHR\$(7); IGET Y\$

15600 PRINTY#;

15700 IF Y="Y" THEN Y=1

15800 IF Y = "N" THEN Y=0

15900 PRINTIRETURN

16000 REM STARTUP

16700 IF BL=0 THEN FOR I=1T0500:NEXT I:RETURN

16900 VTAB(22) 1HTAB(8)

17000 FLASH: PRINT"STANDBY- BLOAD RUNNING"

17100 NORMAL

17200 PRINTD#; "BLOAD ASMO9.BIN, A", STR#(CODE)

17300 PRINTD#; "BLOAD ASMO9IO.BIN, A"STR#(IO)

17400 RETURN

17500 REM LAST LINE

ASM09IO

INTERFACE SUBROUTINE FOR ASM09

```
SOURCE FILE: ASMO910
00000:
                 1 *
0000:
                 2 **************
00001
                 3 * (C) 1981, CONEJO COMPUTER PRODUCTS
0000:
                 4 * 3655 THOUSAND DAKS BL.
0000:
                 5 * WESTLAKE VILLAGE, CA
                                             91362
0000:
                 6 *
                       ALL RIGHTS RESERVED
0000:
                 フ *
0000:
                 8 ***** ASMO9IO.TXT, 6502 CODE *****
0000:
                 9 *
0000:
                10 *
                      >> THIS 6502 CODE IS POSITION-INDEPENDENT
0000:
                11 *
                         AND CAN BE RELOCATED AT "BLOAD"-TIME
0000:
                12 *
0000:
                13 * THIS PROGRAM INTERFACES ASMO9, THE BASIC
0000:
                14 * CODE TO ASMO9.BIN, THE 6809 CODE
0000:
                15 *
2000:
                16 CODEAT
                           EQU
                                8192
                                           WHERE ASMO9.BIN GOES
---- NEXT OBJECT FILE NAME IS ASMO910.0BJ0
1E00:
                17
                               CODEAT-512 WHERE ASMO9IO.BIN GOES
                           ORG
1E00:
                18 *
1E00:
                19 * DOS ADDRESSES:
1E00:
                20 *
FDED:
                21 COUT
                           EQU
                                $FDED
                                           CHAR OUT
FDOC:
              . 22 CIN
                           EQU
                                $FDOC
                                           CHAR IN
1E00:
                23 *
                24 * PAGE ZERO MAILBOXES W/BASIC AND ASMO9
1E00:
1E00:
                25 *
00FA:
                26 RXCMD
                           EQU
                                250
                                           MAILBOX W/6809
OOFC:
                27 TXCMD
                           EQU RXCMD+2
                                           DITTO
1E00:
                28 * ASMO9 POKES SLOT# * 16 HERE:
OOFE:
                29 SLOTNO EQU TXCMD+2
                                           BASIC POKES IT HERE
1E00:
                30 * EG: IF MILL IN SLOT 4, C(SLOTNO)=$40
1E00:
                31 *
1E00:
                32 * REGISTERS WITHIN THE MILL
1E00:
                33 *
C080:
                34 SLOTO
                           EQU
                                $C080
                                           ADDR OF SLOT O
C081:
                35 RUN09
                           EQU
                                SLOTQ+1
                                           IO ADDR+2 IS RUN BIT
C082:
                36 RESET
                           EQU SLOTO+2
                                           6809 RESET, 1=FALSE
                37 *
1E00:
                38 * PROTOCOL CODES USED HEREIN, OTHERS IN BASICO9
1E00:
1E00:
                39 *
0001:
                40 LISTCH
                          EQU
                                           SEND CHAR TO LISTING
                                1
0002:
                41 READCH
                           EQU
                               2
                                           READ CHAR FROM DISK
1E00:
                42 *
1E00:
                43 *********************
1E00:
                44 * BASIC DOES A "CALL IO" TO HERE: *
1E00:
                45 ********************
1E00:
                46 *
1E00:A4 FE
                47
                           LDY
                                SLOTNO
                                           GET TOADDRESS LOW PART
1E02:A9 80
                48
                           LDA
                                #$日〇
1E04:99 82 CO
                49
                           STA
                                RESET, Y
                                           SET RESET=FALSE
                                           SET RUN=1
1E07:99 81 CO
                50
                           STA
                                RUNO9, Y
1E0A:
                51 *
1E0A: A2 00
                52 A000
                           LDX
                                #O
                                           CONSTANT
                53
                           LDY
                                SLOTNO
                                           GET SLOT NO.
1EOC: A4 FE
                54
                                4$80
                                           SET RUN=1
1E0E: A9 80
                           LDA
                55
                           STA
                                RUNO9, Y
1E10:99 81 CO
                56 *
1E13:
1E13:
                57 *
1E13:
                58 *
                59 *
1E13:
```

```
1E13:
                 60 *
1E13:
                 61 *
1E13:
                 62 *
1E13:
                 63 *
LE13:
                 64 *
                 と ごら
1E13:
1E13:A5 FA
                 66 A100
                             LDA
                                   RXCMD
                                              ANYTHING ON RCV?
1E15:F0 17
                 67
                             BEQ
                                              IF NO
                                   B100
                             CMP
                                   #READCH
                                              IS IT "READ A CHARACTER" ?
1E17:C9 02.
                 68
                                              IF SO, DO IT
1E19:FO 05
                 69
                             BEQ
                                   A200
1E1B:
                 70 * ALL OTHER COMMANDS HANDLED BY BASIC
1E1B:8A
                 71
                              TXA
                                              ZERO
1E1C:99 81 CO
                                   RUN09, Y
                                              HALT THE 09
                 72
                             STA
1E1F:60
                 73
                             RTS
                                              RETURN TO BASIC
1E20:
                 74 *
1E20:
                 75 * IS READ A CHAR FROM SOURCE FILE CMD
1E20:
                 76 *
1E20:8A
                 77 A200
                             TXA
                                              ZERO
1E21:99 81 CO
                 78
                              STA
                                   RUNO9, Y
                                              HALT THE 09
1E24:20 OC FD
                 79
                             JSR
                                              FETCH CHAR
                                   CIN
1E27:85 FB
                 80
                              STA
                                   RXCMD+1
                                              PASS VIA MAILBOX
                                              RESET COMMAND
1E29:86 FA
                 81
                             STX
                                   RXCMD
1E2B: 18
                 82
                              CLC
1E2C:90 DC
                                               (JMP) NEXT COMMAND
                 83
                             BCC
                                   A000
1E2E:
                 84 *
                 85 * POLL THE OTHER SIDE, OUTPUT FROM THE 09
1E2E:
1E2E:
                 86 *
                                   TXCMD
                                              ANY COMMAND?
1E2E: A5 FC
                 87 B100
                             LDA
1E30:F0 E1
                 88
                              BEQ
                                   A100
                                              IF NO
                 89
                                               SEND TO LISTING?
1E32:C9 01
                             CMP
                                   #L1STCH
                                               IF NO
1E34:D0 10
                  90
                              BNE
                                   B300
1E36:
                  91 *
1E36:
                  92 * SEND LISTING CHARACTER
                 93 *
1E36:
                 94
1E35:8A
                              TXA
                                              ZERO
1E37:99 81 CO
                  95
                              STA
                                   RUNO9.Y
                                              STOP THE 09
1E3A:
                  96 *
                         IN CASE I/O NEEDS FULL SPEED 6502
                                              GET DATA
                  97
1E3A: A5 FD
                              LDA
                                   TXCMD+1
1E3C:09 80
                 98
                              ORA
                                   #$80
                                              MERGE MSB
                  99
                                   COUT
1E3E:20 ED FD
                              JSR
                                              SEND CHAR
1E41:86 FC
                100
                                   TXCMD
                                              RESET COMMAND
                              STX
1E43:18
                              CLC
                 101
1E44:90 C4
                102
                              BCC
                                   A000
                                              CONTINUE POLL
1E46:
                 103 *
                104 * IS START/STOP OBJECT
1E46:
1E46:
                105 *
                106 8300
1E46:8A
                              TXA
                                              STOP 109
1E47:99 81 CO
                107
                              STA
                                   RUN09, Y
                                              GOTO BASIC
                108
                              RTS
1E4A:60
                 109 *
1E4B:
1E4B:
                110 *
                 111 **** END OF TEXT *****
1E4B:
```

*** SUCCESSFUL ASSEMBLY: NO ERRORS

LOAD09

6502 PROGRAM TO LOAD PROGRAMS FOR THE MILL

```
SOURCE FILE: LOADO9
 00000
                   1 * LOADO9 - 6502 M/L
 00001
                   2 * FILENAME=LOADO9.BIN
 0000
                   3 * REV: 5/9/81
 10004
                   4 *
  ---- NEXT OBJECT FILE NAME IS LOADO9.OBJO
 6000:
                   5
                             ORG $6000

<<< CHANGE AS NEEDED <<<</pre>
 6000:
                   6 *
 6000:
                   7 * THE CALLER OF THIS SUBROUTINE MUST
 6000:
                   8 * OPEN AN ASMO9 HEX FILE AND ISSUE A READ
 6000 x
                   9 * COMMAND TO DOS. THIS CODE READS ALL DATA
 4000:
                  10 * RECORDS, STORES ALL DATA, AND RETURNS
 6000±
                  11 * AFTER PROCESSING THE "END" RECORD.
 6000:
                  12 * ON RETURN, THE END RECORD'S STARTING
 4000 :
                  13 * ADDRESS IS IN LOCATIONS.
 OOFA:
                  14 XFERHI
                             EQU: 250
                                                    SIGNIF. BITS
                                              MOST
OOFB:
                  15 XFERLO
                             EQU
                                   251
                                             LEAST SIGNIF. BITS
6000:
                  16 *
6000:
                  17 *
FDOC:
                  18 INCH
                             EQU
                                   $FDOC
                                             READ CHAR FROM INPUT
4000:
                  19 *
6000: D8
                 20 START
                             CLD
                                             NO DECIMAL
6001:
                  21 *
4001:20 OC FD
                 22 A100
                             JSR
                                   INCH
                                             GET CHAR
6004:29 7F
                 23
                             AND
                                   井事フF
6006:C9 3A
                 24
                             CMP
                                   A2##
                                             ":". START OF RECORD
6008:DO F7
                 25
                             BNE
                                   A100
600A:20 48 60
                 26
                             JSR
                                  HEX2
                                             READ RECORD TYPE
600D:C9 03
                 27
                             CMP
                                   #3
                                             ="END"
600F:F0 2C
                 28
                             BEQ
                                  B200
                                             IF END RECORD
 011:09 01
                 29
                             CMP
                                   #1
                                             ="DATA"
8013:F0 04
                 30
                             BEQ
                                  B100
6015:00
                 31
                             BRK
                                             ILLEGAL RECORD
6016:40 00 60
                 32
                             JMP
                                  START
6019:
                 33 *
6019:
                 34 * PROCESS DATA RECORD
6019:
                 35 ×
6019:20 48 60
                 36 B100
                             JSR
                                  HEX2
                                             GET ADDRESS-HI
601C:8D 2E 60
                 37
                             STA
                                  B160+2
                                             SETUP INDIRECT
601F:20 48 60
                 38
                             JSR
                                  HEX2
                                             GET ADDRESS-LO
6022:8D 2D 60
                 39
                             STA
                                  B160+1
6025:20 48 60
                 40
                             JSR
                                  HEX2
                                             GET COUNT
6028: AA
                 41
                             TAX
                                             SAVE COUNT
6029:20 48 60
                 42 B150
                             JSR
                                  HEX2
                                             GET DATA BYTE
602C:8D FF FF
                 43 B160
                             STA
                                  $FFFF
                                             STORE DATAA
602F:EE 2D 60
                 44
                             INC
                                  B160+1
                                             ADVANCE FOINTER
6032:D0 03
                 45
                             BNE
                                  B170
6034:EE 2E 60
                 46
                             INC
                                  B160+2
                                             16 BIT ADDR
6037:CA
                 47 B170
                             DEX
                                             LOOP ON RECORD COUNT
6038: DO EF
                 48
                             BNE
                                  B150
603A:4C 01 60
                 49
                             JMP
                                  A100
                                             NEXT RECORD
603D:
                 50 *
603D:
                 51 * PROCESS END RECORD
603D:
                 52 *
603D:20 48 60
                 53 B200
                             JSR
                                  HEX2
                                             GET HI OF STARTING ADDRESS
6040:85 FA
                 54
                             STA
                                  XFERHI
                                             STORE IT
 042:20 48 60
                 55
                             JSR
                                  HEX2
                                             GET LOW OF STARTING ADDRESS
3045:85 FB
                 56
                             STA
                                  XFERLO
                                             STORE IT
6047:
                 57 *
6047:
                 58 *
6047:
                 59 *
```

```
6047:
                   60 ×
3 6047:
                   61 *
 6047:
                   62 *
 6047:
                   63 *
 6047:
                   64 *
 6047:
                   4 26
 6047:
                   66 *
 6047:
                   67 * RETURN TO CALLER
 6047:
                   4 86
 6047:60
                   69
                               RTS
 6048:
                   70 *
 6048:
                   71 ********************
 6048:
                   72 *
 6048:
                   73 * READ TWO HEX/ASCII BYTES, RETURN
 60481
                   74 * BINARY EQUIVALENT IN Y.
 6048:
                   75 *
 6048:20 5A 60
                   76 HEX2
                               JSR
                                    HEX1
                                               READ 1ST
 604B: 0A
                   77
                               ASL
                                    Α
                                               MSB
 604C: 0A
                   78
                               ASL
                                    Α
 604D: 0A
                   79
                               ASL
                                    A
 604E: 0A
                   80
                               ASL
                                    A
 604F:8D 59 60
                   81
                               STA
                                    HEX2X
 6052:20 5A 60
                   82
                               JSR
                                    HEX1
                                               GET 2ND
 6055:0D 59 60
                   83
                               ORA
                                    HEX2X
                                               MERGE
 6058:60
                  84
                               RTS
 6059:00
                   85 HEX2X
                               DFB
                                    O
 605A:
                  86 *
 605A:
                  87 * READ AND CONVERT 1 HEX CHAR
 605A:
                   88 * RETURN BINARY EQUIVALENT IN ACCUM.
 605A:
                  89 *
 605A:20 OC FD
                  90 HEX1
                               JSR
                                    INCH
                                               GET CHAR
 605D:29 7F
                  91
                               AND
                                    ##7F
                                               KILL MSB
 605F:C9 3A
                  92
                               CMP
                                    #$39+1
                                               797+1
 6061:30 03
                   93
                               BMI
                                               IF 0..9
                                    HEX1A
 6063:38
                  94
                               SEC
 6064:E9 37
                  95
                               SBC
                                    #55
                                               MAKE 10..15
 6066:29 OF
                  96 HEX1A
                               AND
                                    ##OF
                                               4 BITS
 6068:60
                  97
                               RTS
                                               IN ACCUM
 6069:
                  98 *
 6069:
                  99 * LAST LINE
 6069:
                  100 *
```

*** SUCCESSFUL ASSEMBLY: NO ERRORS

6001 A100 6037 B170 6048 HEX2 FA XFERHI 6019 B100 603D B200 6059 HEX2X FB XFERLO 6029 B150 605A HEX1 FDOC INCH 602C B160 6066 HEXIA 6000 START

SAMPLE OF LOADER FORMAT

011000022002

:0110023A0628328D016AAE8CF7318D0065A6A0A78026FAC630318D00676C26A62681392341E7266 325A62581392337E7256C24A6248139232DE7247DC030

:01103C386C23A62381392320E7236C22A62281392316E7226C21A6218139230CE7216CA4A6A4813 72302E7A4308D000C10AE8C96A680A7A026FA20A1

:0110740E3638303920434F554E54494E4720

:011082083030303030303000

031000

DEMO1

1

```
# FILE=DEMO1.TXT
           * 6809 / APPLE DEMO PROG
           * RUNS A COUNTER ON TOP LINE
                          OPT
                                  MUM
11
                                            <<< CHANGE AS DESIRED <<<
                                  4096
                          ORG
12 1000
                                             CRT ADDRESS
                                  $7F0
                  SCREEN EQU
           07F0
13
                                             I/O FOR SPEAKER
                                  $C030
                  BEEP
                          EQU
           C020
14
                          BRA
                                  BEGIN
                  START
15 1000 2002
                                             SCREEN ADDR
                                  $628
                  ADDR
                          FDB
16 1002 0628
                                  END+232, PCR SET STACK POINTER
18 1004 328D016A BEGIN
                          LEA8
                                             SCREEN ADDRESS
                                  ADDR, PCR
                          LDX
19 1008 AEBCF7
                                             "6809 COUNTING ...."
                                  MSG1,PCR
                          LEAY
20 100B 318D0065
                                  , Y+
                          LDA
21 100F A6A0
                  L100
                                  , X+
                          STA
22 1011 A780
                                  L100
                          BNE
23 1013 26FA
                                  # ° O
                                             ASCII ZERO
                  L200
                          LDB
25 1015 C630
                                  MSG1A, PCR BUFFER ADDRESS
                          LEAY
26 1017 318D0067
                                             FROM HERE WE INCREMENT BCD DIGITS
                          INC
                                  6, Y
27 101B 6C26
                                             BY ADDING 1 TIL '9' THEN DO CARRY
                          LDA
                                  6, Y
28 101D A626
                                  #19
                          CMPA
29 101F 8139
                                  L300
30 1021 2341
                          BLS
                          STB
                                  6, Y
31 1023 E726
                                  5, Y
32 1025 6025
                          INC
33 1027 A625
                          LDA
                                  5, Y
                                  #"9
                          CMPA
34 1029 8139
                                  L300
                          BLS
35 102B 2337
                                  5, Y
36 102D E725
                          STB
                                  4, Y
                          INC
37 102F 6C24
                                  4, Y
38 1031 A624
                          LDA
                                  #'9
                          CMPA
39 1033 8139
                                  L300
                          BLS
40 1035 232D
                          STB
                                  4.Y
41 1037 E724
                                  BEEP
                                             CLICK SPEAKER
                          TST
42 1039 7DC030
                                  3, Y
                          INC
43 1030 6023
                                  3, Y
                          LDA
44 103E A623
                                  #19
                          CMPA
45 1040 8139
                          BLS
                                  L300
46 1042 2320
                          STB
                                  3, Y
47 1044 E723
                                  2, Y
                          INC
48 1046 6C22
                          L-DA
                                  2, Y
49 1048 A622
                                  #'9
                          CMPA
50 104A 8139
                                  L300
51 104C 2316
                          BLS
                                  2, Y
                          STB
52 104E E722
                                  1,Y
53 1050 6C21
                           INC
54 1052 A621
                                  1,Y
                          LDA
                                  #19
                           CMPA
55 1054 8139
                                  L300
                           BLS
56 1056 230C
57 1058 E721
                           STB
                                   1,Y
                                  , Y
                           INC
58 105A 6CA4
                                   , Y
                           LDA
59 105C A6A4
                                   #19
                           CMPA
60 105E 8139
                                  F200
                           BLS
51 1060 2302
                                   , Y
                           STB
62 1062 E7A4
                                              SEND DATA TO CRT
                                   MSG1,PCR
64 1064 308D000C L300
                           LEAX
                           LDY
                                   ADDR, PCR
65 1068 10AE8C96
```

EMO1.TXT - A SIMPLE DEMONSTRATION OF 6809+APPLE C) 1981, CONEJO COMPUTER PRODUCTS

66	106C	A680 A7A0	L400	LDA STA	, Y+	MOVE	LOCAL	TO	CRT	MEMORY
9.5	1070	26FA 20A1		BNE BRA	L400 L200	MAIN	LOOP			
71 71	1074 107A	36383039 434F554E	20 MSG1 54494E4	FCC 7	"6809 COUN	TING	11			
71	1082 1082	20 30303030			"0000000,	0				
72 73 74	1088	303000 000E 108A	CNT END	EQU EQU	M8G1A-M8G1 *					
76		1000		END	START					

13 SYMBOLS IN TABLE:

DR \$1002 BEEP =C030 BEGIN \$1004 CNT =000E END =108A L100 \$100F L200 \$1015 L300 \$1064 L400 \$106C M8B1 \$1074 M8B1A \$1082 SCREEN=07F0

SYMBOL TABLE END: 417D

O STATEMENT ERROR(S), LAST PC:1089



NOTICE

Stellation Two and Conejo Computer Products reserve the right to make improvements in the Assembler Development Kit at any time and without notice.

DISCLAIMER OF ALL LIABILITY AND WARRANTIES:

STELLATION TWO AND CONEJO COMPUTER PRODUCTS MAKE NO WARRANTIES, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO THE SOFTWARE, HARDWARE OR DOCUMENTATION OF THE ASSEMBLER DEVELOPMENT KIT, ITS QUALITY, PERFORMANCE, MERCHANTABILITY, OR FITNESS FOR ANY PARTICULAR PURPOSE. THE ASSEMBLER DEVELOPMENT KIT IS SOLD "AS IS". THE ENTIRE RISK AS TO ITS QUALITY, FITNESS AND PERFORMANCE IS WITH THE BUYER. SHOULD ANY PART OF THE ASSEMBLER DEVELOPMENT KIT PROVE DEFECTIVE FOLLOWING ITS PURCHASE, THE BUYER (AND NOT STELLATION TWO, CONEJO COMPUTER PRODUCTS, DISTRIBUTOR OR RETAILER) ASSUMES THE ENTIRE RESPONSIBILITY FOR ALL NECESSARY SERVICING, REPAIR OR CORRECTION AND ANY INCIDENTIAL OR CONSEQUENTIAL DAMAGES. IN NO EVENT WILL STELLATION TWO OR CONEJO COMPUTER PRODUCTS BE LIABLE FOR DIRECT, INDIRECT, INCIDENTIAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT IN THE ASSEMBLER DEVELOPMENT KIT EVEN IF STELLATION TWO OR CONEJO COMPUTER PRODUCTS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF IMPLIED WARRANTIES OR LIABILITY FOR INCIDENTIAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

COPYRIGHT:

THE MILL, THE SOFTWARE AND DOCUMENTATION OF THE ASSEMBLER DEVELOPMENT KIT ARE COPYRIGHTED BY STELLATION TWO AND/OR . CONEJO COMPUTER PRODUCTS. WHILE STELLATION TWO AND CONEJO COMPUTER PRODUCTS ALLOW AND ENCOURAGE THE COPYING OF THE SOFTWARE PORTION OF THE KIT FOR BACKUP PURPOSES BY A SINGLE END-USER FOR A SINGLE SYSTEM, WE REMIND THE DEALER AND USER THAT ANY OTHER COPYING IS A VIOLATION OF FEDERAL AND INTERNATIONAL LAW. THE DAMAGES FOR VIOLATION OF THESE LAWS IS SUBSTANTIAL AND NOT WORTH THE RISK INVOLVED. THE EXPRESS WRITTEN CONSENT OF STELLATION TWO AND CONEJO COMPUTER PRODUCTS IS REQUIRED FOR ANY OTHER COPYING OR TRANSLATION OF ANY PART OF THE ASSEMBLER DEVELOPMENT KIT.

-- OWNER'S REGISTRATION FORM --

CONEJO COMPUTER PRODUCTS
3655 Thousand Oaks Blvd. Suite 255
Westlake Village, California 91362 USA

THE MILL, 6809 ASSEMBLER PKG., VI

11	
0111661	
CITY/STATE	
COUNTRY	
	SED: MONTH: DAY:, YEAR: 19
THE MILL SE	RIAL NUMBER
APPLICATION	please check one: *
	DUSTRIAL END-USER [] SCHOOL [] HORBY []
SOFTWARE DE	VELOPER [] OTHER []
We would	appreciate a brief explanation of your intended and any comments regarding the manual, suggestions for

new products, etc.: